

November 1989

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ATARI
COMPUTER
ENTHUSIASTS

December 1989

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P3ACE is an independent organization of computer enthusiasts. We are not in any way a part of Atari, inc.

The Group's objective is to promote interest in and use of Atari Computers for the benefit of the users.

P3ACE maintains a library of public domain software, documentation, publications, and newsletters exchanged with other users groups. These are available for check-out by P3ACE members.

P3ACE assumes no liability for program accuracy or information published in the P3ACE Newsletter. Opinions expressed in the P3ACE Newsletter are those of the individual authors, not necessarily those of P3ACE, its officers, or its staff.

P3ACE membership dues are \$15.00 per years. We invite anyone interested in the group to visit our 8-bit meetings held at 7:00pm the first Wednesday of each month or our 16-bit meetings held at 7:00pm the fourth Thursday of the month. Both meetings are held at the Rustic Hills Consumer Center. It's locate at the southeast corner of Academy and Palmer Park, in the Rustic Hills Mall.

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THE PREZ SEZ

by DAVID KOSTER

WELL....!

Hello everyone, I hope you had a wonderful summer and are enjoying this last vestige of decent weather. I don't like winter very much. It would be OK if we could confine it to, umm....a couple weeks in January, I suppose. The last two weeks, nothing much happens then anyway. Might be a good distraction.

Lots of things happening in the Atari world! Locally, we had some pretty good meetings lately. The XL/XE SIG demonstrated Keith Ledbetter's EXPRESS! terminal program cartridge in September and the EASYSCAN II graphics scanner from Innovative Concepts in October. John Sandgren did both of those, and did great, but I sure would like to see someone else up there demo'ing something. If you have something new (or just new to the majority of us!), please show us at the meeting sometime. Give John a call and he'll be happy to give you the floor next month!

The ST SIG in October was graced with the presence of Linda Cullem, a professional musician and MIDI guru. She and her friend (I wished I'd gotten her name) lugged a ton of equipment to the meeting and gave us an excellent review of the latest DR. T'S MIDI-related software. Linda gives MIDI classes and runs a MIDI workshop, so if you're a musician and/or computerist wanting to expand horizons, give her a call.

Howard Adams, Ed Fletcher, and I are getting the new 8-bit library ready for the public. The new disks come from my friend Fred Koch and are arranged by subject, which should make it a little easier to find things. We're keeping the old library intact and hope to gradually scan it and move unique programs over to the new format. Should be ready by the next (Nov) XL/XE meeting.

Practical Solutions has sent us the first of their products for review. They have this great program where user groups send them a one time fee of \$25 and they send the group each of the products they make, one at a time. When the review of that product appears in the group's newsletter, they can ask for the next product for review. And, get this, the group keeps the stuff! If

Atari Corp gave us support like that, we'd have ST's in every garage and a chicken in every pot! The first product we've received is their TWEETY BOARD, an audio upgrade board. I installed it in my machine and gave it a try, the review is in this issue. Practical Solutions supports the ST in a big way, support them by giving their products a good look.

BTW, they just announced a wireless mouse (!) for the ST.

We are combining the November ST and the December XL/XE into one extravaganza meeting the first Tuesday in December. This will be our yearly "business" meeting where we decide who would like to run the show for the next calendar year. We will have give aways to give away and an auction. In any case, refreshments will be provided and we'll do our best to keep business to a minimum and fun to the max!

And now for something completely different, here's news from the national scene:- ST INFORMER reports Michtron is releasing a hardware IBM PC emulator comparable to Avant Garde's PC DITTO II. It's called PC SPEED, piggybacks on the 68000 MPU, runs at Norton 4 (!), and costs \$399.00. Evidently this little gem is from Europe and Michtron is the US distributor. It was being SOLD at the DC Atarifest on Oct 7-8, so it must be more than vapor.

- Sam Tramiel said the following during a GENIE conference on Aug 30th: "We plan to ship the TT [68030-based workstation] in 4th quarter, 1989." "We are shipping STE [Enhanced ST w/4096 colors, 8-bit digital sound] to Europe in September. The US should see STE's in October." "We will be shipping Stacy [portable ST] by October...pending FCC bureaucracy." "...TOS 1.4 ROMs are now available to your dealers." "We...plan to launch the Portfolio [pocket-sized PC-clone] with direct response big advertising in mid-September, and use this machine to attract dealers to the ST line."

- The Apple Macintosh Portable is out, list price \$6500-\$7000. Stacy ST portable w/internal 20 meg HD and Dave Small's Spectre GCR system will cost you about \$2500, probably a lot less. Watch the YUP's suck up the Mac portables.

- Chris Roberts is no longer the User Group Coordinator for Atari. It's my fault. As soon as I write to the user

group person at Atari Corp, he/she quits/get fired/disappears. Z-NET sez the new coordinator will be Robert Brodie, a user group president from Orange County, CA. I won't write him soon.

- User group newsletters across the country are filled with virus reports. Come to a meeting and read some. First, however, get a virus check program and CHECK ALL YOUR DISKS, especially if you download a lot. That's all, see you at a meeting soon!

8-BIT TIDBITS

by JOHN SANDGREN

Members of our 8-bit SIG gathered at Rustic Hills Mall on October 3rd to meet, greet, and generally carouse.

As has been the habit at our last few meetings, the true die hards held down the fort. Our SIG is over 30-strong, yet the same small group of 8-bit lovers keeps the club going. I know there are club members out there who I have yet to meet face-to-face, even though I've been the 8-bit SIG VP since January; and there are some club members whose attendance at club meetings could be counted on one hand, with some fingers to spare. Please excuse me if I sound a little bitter, but I can't really hide my feelings that well. Last January I accepted leadership of the 8-bit SIG with high hopes. I wanted to prove to all the loyal 8-bit owners that not only is the 8-bit Atari computer alive and well, but that it can do most everything that a person of nominal needs could desire. Each month I demoed a new (or sometimes old) product for the Atari. Each month I attempted to bring useful, fun, or interesting software to club member's personal libraries through the disks-of-the-month. After the summer lag, I personally contacted each and every 8-bit member to remind him of the upcoming meeting. And still only a few members are interested enough to spend a few hours, one day a month, to share their stories, share their questions, or share their problems with the SIG members. 8-bitners, prove to me that I'm wrong, prove to me that you care about our club, and prove to me that you are interested in seeing the 8-bit Atari computer survive. Analog magazine is combining with its ST-Log starting

in Nov and Ed tells me that Antic will join its ST magazine shortly; and new software is even getting scarce on GENIE. Believe me, if we don't support our Ataris, no one out there will do it for us. We need us!

To end this column in a lighter note, a few comments about upcoming events:

First, Rick Reaser will host the next meeting on November 1st. Rick has recently added a hard disk to his 8-bit Atari, and will show it off at the meeting. For any of you who have thought about upgrading to a hard disk, don't miss this meeting.

Second, according to Dave Koster, club president, the entire P3ACE club will hold its December meeting on our 8-bit meeting date of Dec 5th. We'll have plenty of projects or ideas to discuss, so let's see a tremendous turnout to close out the year. See you at the meeting.



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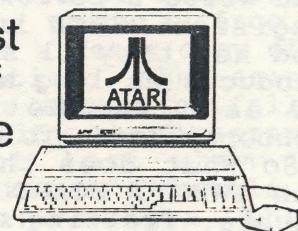
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TWEETY BOARD

by David KOSTER

There are good reasons for the above attitude, shared by many ST owners. With the appropriate synthesizer, keyboard, amplifiers, software, etc., MIDI becomes a symphony. By comparison, the "natural" ST noises sound like a bicycle horn. There are two reasons for this. First, the sound generation chip used by Atari in the ST is not "state-of-the-art", in fact it is only a modest advance over the 8-bit XE computer sound capability. Atari tried to custom design a MUCH better sound chip for the ST, but never got the thing working. The second reason for low-quality ST sound is the monitor speaker. No matter how good your sounds are generated, they ain't gonna sound like much coming sideways out of a 3 inch speaker!

We can't do much about the ST's sound chip, but Practical Solutions has corrected the speaker quality problem. Their TWEETY BOARD is an add-on circuit board that lets you to connect any external audio amplifier to your ST. This eliminates the tyranny of tiny monitor sounds and let's you "crank up" your ST audio. They've even split the three audio channels from the sound chip into three separate outputs, giving a pretty good simulation of STEREO sound. All in a nice, neat package that's fairly easy to install and doesn't uglify the outside of your ST. (By the way, the folks at Practical Solutions let us HAVE, that's right, HAVE a TWEETY BOARD so we could demo it and write a review. We sent them \$25 to register P3ACE in their demo program and now they'll send us each of their products as long as we publish a review of each in the newsletter. What a concept! These folks are great!)

So what does this thing look like? The TWEETY BOARD is about 2.5 inches square. Trailing off the board are two cables. One cable has a connector which fits (rather nicely) over the ST sound chip. Thus signals and power meant for the sound chip are also sucked up by TWEETY. The other cable runs to a small (2"x3/4"x1/2"), FCC-approved (that's what it says) case with three RCA-type audio jacks on it. You already get the idea how to install the thing. Simply open the ST up and place the chip connector over the ST sound chip. It's

held in place with double-sticky tape. Run the other cable through one of the many holes in the back of the ST case. I sent it out through the cart port because it was handy. Find a place for the board itself to sit inside the ST and fix it down with double-sticky tape (already on the back of the board). Close the ST up. Stick the external audio jacks to the back of the ST with, you guessed it, double-sticky tape. Done! Takes about a half-hour, including finding dropped ST case screws in the carpet. If you've got (or plan to get) other upgrades that mount in the case, there may be space problems. You could run the chip connector cable out of the ST and have the whole TWEETY external in a separate case, I suppose. There may be noise problems, however.

The documentation with TWEETY is pretty good. Detailed installation instructions are provided for each computer type. There's also a description of how the thing works. Well, how does it sound? I hooked it up to my stereo receiver, combining two of the three outputs into one using the thoughtfully supplied Y-connector. Here's what I listened to:

(1) "FACTORY" ATARI ST demo - Sounded real good, significantly better than the monitor sound. The stereo effect is good also, with one of the instruments coming out the left speaker. I could increase the volume to rock levels (my usual) without hearing distortion. I did here "processing noise" during certain computer operations, but only at high volume levels.

(2) ST SPEECH and SMOOTH TALKER demo - TWEETY doesn't do speech (well). I had to disconnect one or two of the channels to get understandable speech. The docs explain that digitized sounds (computer-generated speech is similar) won't reproduce well on TWEETY because the replay software expects the channels to be merged by the computer.

(3) MICROMIX demo - The docs were right, straight digitized sound is terrible, filled with hiss and noise.

(4) LCD demo - This demo has straight music like the "Factory" demo, and does it sound good! Once again the "stereo" effect makes the music more interesting.

(5) TIME BANDITS - Can't say the game is much improved by the high quality sounds, but it's nice wearing headphones. The sounds are clearer and

my concentration is certainly better. Scores, mediocre as usual.

(6) Key clicks - I've still got the stereo on and am typing while wearing headphones. Turning the volume up to 80db gives all new meaning to the phrase "audio feedback"! Sounds like someone breaking rocks with a well-tuned sledgehammer.

So, how do I like TWEETY? I had already pulled my ST audio signal out to a RCA-jack so I had already heard what the ST sounded like on an amplifier. TWEETY output is much clearer and has a much high frequency response. The multi channel effect just adds to the fun. I was disappointed digitized sounds don't reproduce, I was looking forward to hearing BETTER digitized sounds. I'd recommend TWEETY to anyone wanting to improve straight ST (non-MIDI) sounds and music. Low-end music composition and MIDI software that allows the use of the internal ST sound chip will be improved by TWEETY, but check the software first. Some will output to MIDI only. Games using non-digitized sounds are more fun, especially with headphones.

TWEETY BOARD usually sells for about \$50-\$60 dollars. We'll help with installation, but it's certainly not hard. There's a 90-day warrantee from the manufacturer. Practical Solutions has put together a well-designed and manufactured upgrade for those who feel trapped by poor quality monitor sounds that aren't even pointing in the right direction! Thanks for the TWEETY, and thanks again for letting P3ACE test fly it!

EASY-SCAN II

by JOHN SANDGREN

The Easy Scan II is a digitizer for all 8-bit Atari computers with at least 128K of memory. Using this digitizer, you can capture pictures from hard copy to computer file. The scanner consists of a plug-in cartridge which fits into the slot in your computer, and a long fiber optic cable which is connected to the print head of your printer. The complete package also includes 3 ss/sd disks containing the main Easy Scan II program, numerous public domain graphic utility programs, and a set of demos. Also provided is a very brief (too brief) set of instructions. Basically, the program creates a digital representation of a scanned picture by

commanding the print head, and the fiber optic cables along the length of the printer carriage one line at a time. The hardware and software interpret each portion of the scanned picture into one of 15 luminacies, or shades of gray. The scanned picture is interpreted into a total of 61,440 pixels, which is the number of pixels in a mode 8 screen (320 x 192). The complete computer image is then stored as a 492 sector file in ram disk. This file is the raw data file the the rest of the program uses to display the digital image in other modes and colors. Once the raw data file is captured and stored in ram disk, you have numerous options reached through a main menu. The program software allows you to display the image in modes 8, 9, 10, 11, and 15. You have additional capability to change colors according to what each mode allows, and flexibility in defining which luminacies will be interpreted as which color. Other menu options allow you to adjust scan parameters to compensate for picture size and printer speed. Also reached from the main menu is a files option menu which allows you to save or load a 492 sector raw data file, save the current mode picture as a 62 sector Micro Painter file, and perform sundry disk access functions. A digital scanner is a neat addition to other graphic-oriented devices, such as Koala Pad, or light pen. But there are some pitfalls.

First, a glossy picture throws off the capability of the scanner to recognize luminancies differences. A glossy picture turns out all white, because the surface provides complete reflection, just like a white surface. The solution is to make a Xerox copy of any picture to be digitized, then scan the Xerox picture. The second pitfall concerns the flexibility the program provides you. I got lost when I experimented with luminance levels, colors, scan width and margin. The flexibility is there to allow you to compensate for features in the picture to be scanned, but that same flexibility is a two-edged sword for someone like me. I would have preferred either more instructions, or logical grouping of the options to fit several types of pictures. All in all the Easy Scan II is an interesting addition to my collection of gadgets. Someone with patience might put it to

much more work than I think I will, but I suspect I'll find more use for it sometime in the future.

The Easy Scan II is marketed by Innovative Concepts. It can be purchased of \$89.00 directly from IC. It is also available from mail order houses and Horizon Computer.

SPRINGZ

by K.D. Brooks

I recently ordered a few sets of Regent Software's SPRINGZ, as I wanted to install a set on my ST. Having no experience with other keyboards, and having briefly seen and felt a stiffened ST keyboard at one of our meetings a few months ago, I thought I would like a little more key pressure on mine.

All ST keyboard keys except for the 10 function keys and ten additional keys can have these light coil springs installed under the plastic caps. Those ten additional keys are: TAB, CONTROL, SHIFT, SPACE BAR, ALTERNATE, CAP LOCK, RETURN, ENTER, and the ZERO key (on the numeric key pad). This leaves 74 keys which can accept the springs.

Basically you remove the plastic key tops, set on the springs, and snap the key tops back on. The instructions mentioned using a butter knife or screw driver to pry off the key tops, however I felt better about using a pair of small tip needle nose pliers to be able to pull the key tops straight up and off. My experience with "levering" or "prying" plastic things is about as successful as trying to "read" ARCD files without deARCDing the rascals... So I used pliers!

These springs are slightly conical, with part of the largest coil bent slightly in toward the center. I installed mine with the largest coil downward, using the bent end to help hold the spring onto the plastic shoulder extending upward around the base of the metal key shaft. These little springs do get entwined, so part of the job is separating them. They must weigh these little entangled springs when they package them, as I had about 25 extras left over. So save your extra springs and someone can get a free partial or complete set after a few folks install theirs. I like mine, but everyone to their own taste.

THE ST PLAGUE

by William C. Bates

This article will deal only with the common boot sector viruses as the link viruses are less common and have yet to pose a problem in our area.

First off, a brief introduction of the boot sector, the boot sector is this first sector on the disk and is always read by the computer upon boot up. To understand the boot sector better, let's recall the early days of the ST. In the beginning, the ST did not have it's operating system built into it, instead it had to be loaded into the computer by a special disk called the TOS DISK. Without this TOS DISK (the operating system) the ST knew only two things:

A) *There should be a disk drive out there.*

B) *If ' is the first byte written in the boot sector, load whatever the boot sectors says to load. If anything else is written in the boot sector ignore it and play dumb.*

Today the STs have their operation systems built in so there is no need for the TOS DISK but the ' in the boot sector will still cause the ST to load whatever ' tells it to do.

That is where it started, '. To the person writing viruses this is an open door. The command ' will cause the ST to execute the boot sector first before AUTO folders, Accessories, and the Desktop Info file.

The viruses themselves vary in what they do. They can be custom tailored to do almost any task imaginable. From erasing only the *.RSC from all your disks to putting nasty messages on the screen, viruses basically do whatever their creators choose. In the Colorado Springs area, the most popular viruses are the Mouse Inversion Virus, which causes the mouse to move the opposite direction you want it to, and the Un-Formatting Virus, which will destroy your disks a piece at a time.

The boot sector viruses can be detected by many means. The most common way is to run a virus killing program and check all your disks with it. In my opinion, VDU 3.0 is by far the best program for this, however there are Public Domain programs available which will get the job done.

Another way to detect viruses is by putting Anti-viruses in the boot

sectors of your disks. Anti-viruses are loaded the same way viruses are loaded via '. They either leave messages on the screen like "No Virus in Boot Sector" or make a noise through the monitor speaker. The idea behind the Anti-virus is that after hundreds of times, seeing the same message upon boot up, the second it's gone you will automatically realize something over wrote your Anti-Virus.

The final way is to have a program check your disks during your normal computer operations and inform you of viruses whether you are in the middle of Interlink or even dearcoring files. The popular Public Domain ACC file called James Butler does this quite well. I have yet to fool it, even while using several memory hungry programs.

Some protective measures I have found which has insured my system 100% virus free are, only booting up with specifically marked disks which I know are 100% virus free (and contain the accessory file James-Butler), cold starting the computer OFTEN, write protecting all but my data disk, installing Anti-Viruses on my disks, and most of all, checking all disks which come into my possession no matter who gave them to me which library they came from.

These precautions cause more disk swaps and down time but the end result is well worth it.

If you would like to see examples of what viruses can do (safely), George Woodside has written a Public Domain program called FLU.ARC which gives examples of some of the viruses out there.

If you have trouble finding FLU.ARC, James-Butler or any other Public Domain program I have mentioned, please call me as I have an extensive library of Public Domain Virus programs and will be happy to give you copies of the programs or just check out our P3ACE library.

P3ACE will be holding their combined 8/16 bit meeting on the 5th of December 1989. This will be the last meeting of the year and new officers will be elected. Also P3ACE will hold atleast two auctions.

The drinks will be provided but, if possible, bring a few cookies, brownies, etc.

Please come to the last meeting of the 1980s.
(Yes, there will be no SJ meeting in December).

In Closing...

by William C. Bates

First off, I would like to thank my fellow editor for his work with the newsletter. As most of the 8-bit group already knows, Jim Cox has left us. He is now in West Germany, where he will remain for a few years. Hopefully when he returns, he'll have new hardware to review.

Secondly, Groilier did not like the idea of The Colorado Springs Public Library using the Denver Library's on line encypodia so it is now restricted from us. I went to the main library to get the facts on this and the head of the computer department told me Groilier wanted an extremely high yearly fee plus \$6.00 per person per hour fee just to be able to use their on line encyclopedia. He said it would be impossible to pay the fees they wanted and that they were looking into getting a different on line encyclopedia for us.

I feel this is a good attitude to have all things considered. When a company knowingly sells me faulty products I certainly will not buy products from that company again. I pity the Groilier salesman who knocks on my door.

Thirdly, P3ACE is currently looking for someone to review our next product from Practical Solutions. We would also like someone to write an article on telecommunications for the newer computer users out there.

Lastly, recently there has been a lot of other user groups writing about viruses they've encountered. It appears we are in no means alone. As I mentioned in the article this month, take precautions, even on commercial software. A friend of mine recently found viruses on three of his disks (The only viruses he had). The disks were to a game he had received by mail order. He first thought it was normal as some games use the boot sector but when his backups crashed he began to think. He called the company and they told him they were sorry, he sent them in and the company replaced them, free. (Obviously the company had this problem before). There are lists of programs available which list all the commercial software which legitimately use the bootsector. I cannot stress enough, be careful.

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